

LISTING OF CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. - 15. (canceled)

16. (currently amended) The dispensing apparatus of claim 38, wherein the at least two cylindrical bores further comprise at least two partly overlapping cylindrical bores [have]having a region of overlap and the at least two partly overlapping cylindrical bores having substantially parallel internal walls, [that are substantially parallel, and] wherein the helical threads of the at least two feed screws are in sliding contact with the internal walls of the middle portion of the chamber, and [where] the helical threads of the at least two feed screws are intermeshing in the region of overlap.

17. (previously presented) The dispensing apparatus of claim 16, wherein the at least two feed screws further comprise helical threads having a variable pitch that decreases as the helical threads approach the bottom portion of the chamber.

18. - 33. (canceled)

34. (previously presented) A method of dispensing a viscoelastic liquid from a dispensing apparatus, comprising the steps of:

introducing a first component viscoelastic liquid to a first feed screw disposed within a chamber;

introducing a second component viscoelastic liquid to a second feed screw disposed within the chamber; and

counter rotating the first and second feed screws a pre-selected amount, mixing the first and second component viscoelastic liquids forming a viscoelastic liquid product and dispensing a measured amount of the viscoelastic liquid product.

35. (previously presented) A method of dispensing a viscoelastic liquid from a dispensing apparatus, comprising the steps of:

introducing a first component viscoelastic liquid to a first feed screw disposed within a chamber;

introducing a second component viscoelastic liquid to a second feed screw disposed within the chamber; and

co-rotating the first and second feed screws a pre-selected amount, mixing the first and second component viscoelastic liquids forming a viscoelastic liquid product and dispensing a measured amount of the viscoelastic liquid product.

36. (currently amended) A dispensing apparatus capable of delivering precise quantities, comprising:

a drive mechanism;

at least two input channels coupled to a chamber, the chamber comprising a top portion, a middle portion, and a bottom portion, wherein the middle portion includes at least two cylindrical bores having internal walls; and

at least two feed screws having helical threads and disposed in the chamber, the at least two feed screws are rotatably supported in the at least two cylindrical bores, and rotated by the drive mechanism, such that a first component viscoelastic liquid is delivered through a first input channel of the at least two input channels to the chamber, and a second component viscoelastic liquid is delivered through a second input channel of the at least two input channels to the chamber, the first input channel and the second input channel disposed so that interaction is hindered between the first component viscoelastic liquid and the second component viscoelastic liquid in either input channel, wherein rotation of the at least two feed screws [mixing] mixes the first and second component viscoelastic liquids forming a viscoelastic liquid product and [the at least two feed screws further discharging] discharges the viscoelastic liquid product from the chamber.

37.(currently amended) A dispensing apparatus capable of delivering precise quantities, comprising:

a drive mechanism;

at least two input channels coupled to a chamber comprising a top portion, a middle portion, and a bottom portion, wherein the middle portion includes two non-overlapping cylindrical bores having internal walls that are substantially parallel; and

at least two feed screws having helical threads and disposed in the chamber, [where] the at least two feed screws are rotatably supported in the two non-overlapping cylindrical bores and rotated by the drive mechanism, and [wherein] the helical threads of the at least two feed screws are in sliding contact with the internal walls of the middle portion of the chamber, and [where] the helical threads of the at least two feed screws are non-intermeshing, such that a first component viscoelastic liquid is delivered through a first input channel of the at least two input channels to the chamber, and a second component viscoelastic liquid is delivered through a second input channel of the at least two input channels to the chamber, [where] the first input channel and the second input channel are disposed so that interaction is hindered between the first component viscoelastic liquid and the second component viscoelastic liquid in either input channel, wherein rotation of the at least two feed screws[, rotated by the drive mechanism,] mixes the first and second component viscoelastic liquids to form a viscoelastic liquid product and discharges the viscoelastic liquid product from the chamber.

38. (previously presented) The dispensing apparatus of claim 36, wherein the middle portion further comprises at least two partly overlapping cylindrical bores.

39. (previously presented) The dispensing apparatus of claim 36, wherein the middle portion further comprises at least two non-overlapping cylindrical bores.

40. (new) A dispensing apparatus capable of delivering precise quantities, comprising:

a drive mechanism;

at least two input channels coupled to a chamber comprising a top portion, a middle portion, and a bottom portion, wherein the middle portion includes at least two partly overlapping cylindrical bores having a region of overlap and having substantially parallel internal walls; and

at least two feed screws having helical threads disposed in the chamber, the helical threads having a variable pitch that decreases as the helical threads approach the bottom portion of the chamber, the helical threads of the at least two feed screws are intermeshing in the region of overlap and are in sliding contact with the internal walls of the middle portion of the chamber, wherein the at least two feed screws are rotatably supported in the two non-overlapping cylindrical bores and rotated by the drive mechanism, such that a first component viscoelastic liquid is delivered through a first input channel of the at least two input channels to the chamber, and a second component viscoelastic liquid is delivered through a second input channel of the at least two input channels to the chamber, the first input channel and the second input channel are disposed so that interaction is hindered between the first component viscoelastic liquid and the second component viscoelastic liquid in either input channel, wherein rotation of the at least two feed screws mixes the first and second component viscoelastic liquids to form a viscoelastic liquid product and discharges the viscoelastic liquid product from the chamber.